

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 12/13/2006

LBADIE SALE #00000004 Mailroom Dt: 12/04/2006 031728 10743638
01 FC : 1251 120.00 DA

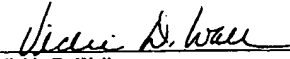
Adjustment date: 02/16/2007 SDIRETA1
12/13/2006 LBADIE 00000004 031728 10743638
01 FC:1251 120.00 CR

PATENT

2007 FEB -5 PM 4:29

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on February 1, 2007.


Vickie D. Wall

Applicant : Hyeong-Gon Noh, et al. Confirmation No. 8214
Application No. : 10/743,638
Filed : December 22, 2003
Title : ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND
RECHARGEABLE LITHIUM BATTERY COMPRISING SAME
Grp./Div. : 1745
Examiner : Laura S. Weiner
Docket No. : 51493/Y35

REQUEST FOR REFUND

Mail Stop 16
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Post Office Box 7068
Pasadena, CA 91109-7068
February 1, 2007

Commissioner:

In reviewing our deposit account statement (no. 03-1728) for the month of December 2006, (copy attached) we noted the following incorrect charge:

12/13 10 10743638 51493/DBP/Y35 1251 \$120.00

The charge appears to be the fee for a one-month extension of time for a response to the Office action dated October 26, 2006, which had a one-month due date. Our response was mailed to the USPTO with a Certificate of Mailing on November 27, 2006 (November 26, 2006 was a Sunday), therefore no additional fees were due.

BEST AVAILABLE COPY

Application No. 10/743,638

Please refund the \$120.00 fee and credit Deposit Account No. 03-1728.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By *D. Bruce Prout*

D. Bruce Prout
Reg. No. 20,958
626/795-9900

DBP/vdw

Enclosures: Deposit Account Statement for the month of December 2006
Copy of Office action dated October 26, 2006
Copy of Response with Certificate of Mailing dated November 27, 2006

VDW PAS721624.1--02/1/07 9:11 AM



**United States
Patent and
Trademark Office**

USPTO
Home
Page
Finance
Online
Shopping
Page

Deposit Account Statement

Requested Statement Month: December 2006
 Deposit Account Number: 031728
 Name: CHRISTIE PARKER & HALE
 Attention: BYRON C. HIBDON
 Address: P.O. BOX 7068
 City: PASADENA
 State: CA
 Zip: 91109-7068
 Country: UNITED STATES

| DATE | SEQ | POSTING REF TXT | ATTORNEY DOCKET NBR | FEE CODE | AMT | BAL |
|-------|------|--------------------|---------------------------|-------------|------------|-------------|
| 12/01 | 79 | 77054130 | 58803/M1018/DEK | 7001 | \$325.00 | \$76,957.62 |
| 12/01 | 244 | 78648392 | 55774/H352/DEK | 7004 | \$150.00 | \$76,807.62 |
| 12/01 | 245 | 78515626 | M743:53866/LES | 7004 | \$300.00 | \$76,507.62 |
| 12/01 | 600 | 78382551 | 52152/U68/LTR | 7004 | \$150.00 | \$76,357.62 |
| 12/01 | 619 | 78382551 | 52152/U68/LTR | 7003 | \$100.00 | \$76,257.62 |
| 12/01 | 758 | 78653184 | 55300/U356/MM | 7004 | \$150.00 | \$76,107.62 |
| 12/01 | 18 | 29249613 | 57878/N270/SAH | 1463 | \$200.00 | \$75,907.62 |
| 12/01 | 359 | 10562368 | K163:56568/WPC | 8021 | \$40.00 | \$75,867.62 |
| 12/01 | 1140 | 78549999 | 54203/H362/SAH | 7004 | \$150.00 | \$75,717.62 |
| 12/01 | 42 | 10569591 | 5341/L510/LTR | 2642 | \$150.00 | \$75,567.62 |
| 12/01 | 70 | 2380366 | B553:42082/RJW | 8521 | \$40.00 | \$75,527.62 |
| 12/01 | 1229 | 78404431 | 52453/Z41-MEG | 7004 | \$150.00 | \$75,377.62 |
| 12/01 | 1239 | 78758824 | 56456/U350/MM | 7001 | \$3,250.00 | \$72,127.62 |
| 12/01 | 1300 | 77054659 | 58606/T490/MM | 7001 | \$325.00 | \$71,802.62 |
| 12/01 | 1792 | 78655554 | 55279/P765/DEK | 7003 | \$100.00 | \$71,702.62 |
| 12/01 | 2022 | 77055014 | 58737/L511/DEK | 7001 | \$975.00 | \$70,727.62 |
| 12/01 | 92 | 11326781 | 56672/C685/DML | 2814 | \$65.00 | \$70,662.62 |
| 12/04 | 647 | 29250816 | 58407/G323/DEK | 2012 | \$100.00 | \$70,562.62 |
| 12/04 | 648 | 29250816 | 58407/G323/DEK | 2112 | \$50.00 | \$70,512.62 |
| 12/04 | 649 | 29250816 | 58407/G323/DEK | 2312 | \$65.00 | \$70,447.62 |
| 12/04 | 987 | 29250822 | 57939/G323/DEK | 2012 | \$100.00 | \$70,347.62 |
| 12/04 | 989 | 29250822 | 57939/G323/DEK | 2312 | \$65.00 | \$70,282.62 |
| 12/04 | 988 | 29250822 | 57939/G323/DEK | 2112 | \$50.00 | \$70,232.62 |
| 12/04 | 721 | 76647642 | 58837/K511/DAP | 7005 | \$100.00 | \$70,132.62 |
| 12/04 | 223 | 11403659 | A557:58370/DML | 8021 | \$80.00 | \$70,052.62 |
| 12/04 | 318 | 11520495 | M521:58381/DBP | 8021 | \$40.00 | \$70,012.62 |
| 12/04 | 138 | 29244409 | 58240/T580/MM | 2502 | \$400.00 | \$69,612.62 |

https://ramps.uspto.gov/eram/Controller;sessionid=0000_a_wH9CQc4z1Auo92MSienm:... 12/18/2006

BEST AVAILABLE COPY

Deposit Account Statement

Page 2 of 5

| | | | | | |
|---------------------------|-------------------|------|---|------------|-------------|
| 12/04 139 29244409 | 58240/T580/MM | 8001 | ✓ | \$30.00 | \$69,582.62 |
| 12/04 329 11321387 | 56850/Y35/DBP | 8021 | ✓ | \$40.00 | \$69,542.62 |
| 12/04 1277 77055911 | 58818/S318/DBP | 7001 | ✓ | \$650.00 | \$68,892.62 |
| 12/04 52 11606755 | 58759/A400/DBP | 9204 | ✓ | -\$410.00 | \$69,302.62 |
| 12/04 97 11606500 | 58803/A400/DBP | 9204 | ✓ | -\$460.00 | \$69,762.62 |
| 12/04 181 60533861 | V186:54154/DBP | 8007 | ✓ | \$20.00 | \$69,742.62 |
| 12/05 900 78272365 | 50702/P396/CTP | 7004 | ✓ | \$450.00 | \$69,292.62 |
| 12/05 1725 60868498 | 58806/M743/DJB | 1005 | ✓ | \$200.00 | \$69,092.62 |
| 12/05 1763 60868502 | 58575/G512/RT | 2005 | ✓ | \$100.00 | \$68,992.62 |
| 12/05 1124 77056790 | 58592/C439/DBP | 7001 | ✓ | \$650.00 | \$68,342.62 |
| 12/05 1 11041925 | 53966/CM/IS51 | 2201 | ✓ | \$200.00 | \$68,142.62 |
| 12/05 2 11041925 | 53966/CM/IS51 | 2202 | ✓ | \$50.00 | \$68,092.62 |
| 12/05 3 11041925 | 53966/CM/IS51 | 2202 | ✓ | \$25.00 | \$68,067.62 |
| 12/05 2271 78764118 | 56522/H350/MM | 7001 | ✓ | \$650.00 | \$67,417.62 |
| 12/05 2383 78611289 | 1267:54364/JWP | 7004 | ✓ | \$150.00 | \$67,267.62 |
| 12/05 2392 77057230 | 52251/M714/DBP | 7001 | ✓ | \$325.00 | \$66,942.62 |
| 12/06 252 10643794 | 50925/DBP/A400 | 1201 | ✓ | \$600.00 | \$66,342.62 |
| 12/06 1058 77057606 | 57789/W444/MM | 7001 | ✓ | \$325.00 | \$66,017.62 |
| 12/06 1784 PCT/US06/61623 | 58855P/G512/RT | 1601 | ✓ | \$300.00 | \$65,717.62 |
| 12/06 1785 PCT/US06/61623 | 58855P/G512/RT | 1602 | ✓ | \$1,000.00 | \$64,717.62 |
| 12/06 1786 PCT/US06/61623 | 58855P/G512/RT | 1701 | ✓ | \$1,008.00 | \$63,709.62 |
| 12/06 1787 PCT/US06/61623 | 58855P/G512/RT | 1703 | ✓ | \$180.00 | \$63,529.62 |
| 12/06 1839 11567119 | 58356/N220/JES | 4011 | ✓ | \$75.00 | \$63,454.62 |
| 12/06 1840 11567119 | 58356/N220/JES | 2111 | ✓ | \$250.00 | \$63,204.62 |
| 12/06 1841 11567119 | 58356/N220/JES | 2311 | ✓ | \$100.00 | \$63,104.62 |
| 12/06 1842 11567119 | 58356/N220/JES | 2202 | ✓ | \$75.00 | \$63,029.62 |
| 12/06 1843 11567119 | 58356/N220/JES | 2201 | ✓ | \$100.00 | \$62,929.62 |
| 12/06 1152 78500806 | 53633/H320/JWP/TT | 7003 | ✓ | \$100.00 | \$62,829.62 |
| 12/06 1172 78500806 | 53633/H320/JWP/TT | 7004 | ✓ | \$150.00 | \$62,679.62 |
| 12/06 395 11518100 | 58169/S1187/DBP | 8021 | ✓ | \$40.00 | \$62,639.62 |
| 12/06 396 11517727 | 57958/S1187/DBP | 8021 | ✓ | \$40.00 | \$62,599.62 |
| 12/06 398 11519488 | 58327/S295/DBP | 8021 | ✓ | \$40.00 | \$62,559.62 |
| 12/06 400 11517140 | 57991/Y35/DBP | 8021 | ✓ | \$40.00 | \$62,519.62 |
| 12/06 402 11515293 | 58312/S1187/DBP | 8021 | ✓ | \$40.00 | \$62,479.62 |
| 12/06 99 11112119 | 54920/WPC/S/US | 2252 | ✓ | \$225.00 | \$62,254.62 |
| 12/06 405 11518003 | 57944/Y35/DBP | 8021 | ✓ | \$40.00 | \$62,214.62 |
| 12/06 235 10687847 | 47994/THD/D359 | 1501 | ✓ | \$1,400.00 | \$60,814.62 |
| 12/06 236 10687847 | 47994/THD/D359 | 1504 | ✓ | \$300.00 | \$60,514.62 |
| 12/06 237 10687847 | 47994/THD/D359 | 8001 | ✓ | \$30.00 | \$60,484.62 |
| 12/06 67 09833969 | 42254/DMC/C685 | 2252 | ✓ | \$225.00 | \$60,259.62 |
| 12/06 213 11542010 | 58740/H673/JWP | 2202 | ✓ | \$150.00 | \$60,109.62 |
| 12/07 4 78272361 | 50700/P396/CTP | 7004 | ✓ | \$600.00 | \$59,509.62 |
| 12/07 16 78272363 | 50701/P396/CTP | 7004 | ✓ | \$600.00 | \$58,909.62 |
| 12/07 87 78490923 | 53392/E87/WGM | 7004 | ✓ | \$300.00 | \$58,609.62 |
| 12/07 1088 2414235 | 28794/A51/BWJ | 7205 | ✓ | \$100.00 | \$58,509.62 |
| 12/07 1089 2414235 | 28794/A51/BWJ | 7208 | ✓ | \$200.00 | \$58,309.62 |
| 12/07 1179 78976604 | 55504.01/A840/GJN | 7004 | ✓ | \$900.00 | \$57,409.62 |
| 12/07 1919 11520286 | 58110/B884/MET | 1051 | ✓ | \$130.00 | \$57,279.62 |

Deposit Account Statement

Page 3 of 5

| | | | | | | | |
|-------|------|----------------|---------------------|------|---|------------|-------------|
| 12/07 | 324 | 11520286 | B884:58110/SM | 8021 | ✓ | \$40.00 | \$57,239.62 |
| 12/07 | 2206 | 11155863 | 55376/DBP/A400 | 1801 | ✓ | \$790.00 | \$56,449.62 |
| 12/07 | 1414 | 78514531 | 53846/Z41/MEG | 7004 | ✓ | \$300.00 | \$56,149.62 |
| 12/07 | 2272 | PCT/US06/61703 | 58356P/N220/ JES | 1601 | ✓ | \$300.00 | \$55,849.62 |
| 12/07 | 2273 | PCT/US06/61703 | 58356P/N220/ JES | 1603 | ✓ | \$300.00 | \$55,549.62 |
| 12/07 | 2274 | PCT/US06/61703 | 58356P/N220/ JES | 1701 | ✓ | \$1,008.00 | \$54,541.62 |
| 12/07 | 2275 | PCT/US06/61703 | 58356P/N220/ JES | 1703 | ✓ | \$180.00 | \$54,361.62 |
| 12/07 | 33 | 78619724 | 110.2*4/B844/ MM | 7402 | ✓ | \$300.00 | \$54,061.62 |
| 12/07 | 34 | 78619722 | 110.2*3/B844/ MM | 7402 | ✓ | \$300.00 | \$53,761.62 |
| 12/07 | 35 | 78611045 | 110.2*5/B844/ MM | 7402 | ✓ | \$300.00 | \$53,461.62 |
| 12/07 | 88 | 09955278 | 56800/N165/DMC | 1201 | ✓ | \$600.00 | \$52,861.62 |
| 12/08 | 49 | 11372702 | 54148/T297/ HAC | 8021 | ✓ | \$40.00 | \$52,821.62 |
| 12/08 | 174 | 11322583 | W112:56426/ AW | 8021 | ✓ | \$40.00 | \$52,781.62 |
| 12/08 | 1 | 11112119 | 54920/WPC/5,245 | 2252 | ✓ | \$225.00 | \$53,006.62 |
| 12/08 | 2 | 11112119 | 54920/WPC/5,245 | 1252 | ✓ | \$450.00 | \$52,556.62 |
| 12/08 | 758 | 77059473 | 58727/P836/ UJN | 7001 | ✓ | \$325.00 | \$52,231.62 |
| 12/08 | 898 | 78278909 | 56324/G529/ SAH | 7004 | ✓ | \$450.00 | \$51,781.62 |
| 12/08 | 454 | 11510372 | 57366/DBP/S1187 | 8021 | ✓ | \$40.00 | \$51,741.62 |
| 12/08 | 566 | 11515205 | 58206/Y35/ DBP | 8021 | ✓ | \$40.00 | \$51,701.62 |
| 12/08 | 194 | 09947077 | 45123/WGM/A23 | 1252 | ✓ | \$450.00 | \$51,251.62 |
| 12/11 | 1 | 78478278 | 53526/ TJD/ A540 | 6004 | ✓ | \$150.00 | \$51,401.62 |
| 12/11 | 17 | 11518281 | 57667/S1187/ DBP | 8021 | ✓ | \$40.00 | \$51,361.62 |
| 12/11 | 381 | 78608723 | 54705/P525/ RAC | 7001 | ✓ | \$325.00 | \$51,036.62 |
| 12/11 | 455 | 78664125 | 45691.01/C924/ MM | 7004 | ✓ | \$150.00 | \$50,886.62 |
| 12/11 | 553 | 2414236 | 28795/A51/ LWJ | 7205 | ✓ | \$100.00 | \$50,786.62 |
| 12/11 | 554 | 2414236 | 28795/A51/ LWJ | 7208 | ✓ | \$200.00 | \$50,586.62 |
| 12/11 | 587 | 77060441 | J202/58930/ MM | 7001 | ✓ | \$325.00 | \$50,261.62 |
| 12/11 | 1757 | 10327752 | 49520/DBP/Y35 | 1806 | ✓ | \$180.00 | \$50,081.62 |
| 12/11 | 119 | 10451389 | B884:56523/ MEH | 1501 | ✓ | \$1,400.00 | \$48,681.62 |
| 12/11 | 121 | 10451389 | B884:56523/ MEH | 8001 | ✓ | \$30.00 | \$48,651.62 |
| 12/11 | 120 | 10451389 | B884:56523/ MEH | 1504 | ✓ | \$300.00 | \$48,351.62 |
| 12/11 | 937 | 77060654 | 58680/B900-AW | 7001 | ✓ | \$650.00 | \$47,701.62 |
| 12/11 | 60 | 60748262 | 56665/C1099/ DBP | 8007 | ✓ | \$20.00 | \$47,681.62 |
| 12/12 | 727 | 10923125 | 52733/DBP/Y35 | 1253 | ✓ | \$570.00 | \$47,111.62 |
| 12/12 | 728 | 10923125 | 52733/DBP/Y35 | 1801 | ✓ | \$790.00 | \$46,321.62 |
| 12/12 | 162 | 60750457 | S1117:58730-ENG/ LM | 8007 | ✓ | \$20.00 | \$46,301.62 |
| 12/12 | 319 | 11525230 | S1170:58399/DBP | 8021 | ✓ | \$40.00 | \$46,261.62 |
| 12/12 | 329 | 11520205 | 57071/S1187/ DBP | 8021 | ✓ | \$40.00 | \$46,221.62 |
| 12/12 | 332 | 11520506 | 57668/S1187/ DBP | 8021 | ✓ | \$40.00 | \$46,181.62 |
| 12/12 | 333 | 11520507 | 57070/S1187/ DBP | 8021 | ✓ | \$40.00 | \$46,141.62 |
| 12/12 | 335 | 10562751 | 56799/A400/ DBP | 8021 | ✓ | \$40.00 | \$46,101.62 |
| 12/12 | 338 | 10552490 | 56224/A400/ DBP | 8021 | ✓ | \$40.00 | \$46,061.62 |
| 12/12 | 2445 | 10250831 | 49803/DBP/R178 | 1251 | ✓ | \$120.00 | \$45,941.62 |
| 12/12 | 2 | PCT/US06/44046 | 58718P/M743/ DBP | 1601 | ✓ | \$300.00 | \$45,641.62 |
| 12/12 | 6 | PCT/US06/44046 | 58718P/M743/ DBP | 8007 | ✓ | \$20.00 | \$45,621.62 |
| 12/12 | 3 | PCT/US06/44046 | 58718P/M743/ DBP | 1602 | ✓ | \$1,000.00 | \$44,621.62 |
| 12/12 | 4 | PCT/US06/44046 | 58718P/M743/ DBP | 1702 | ✓ | \$1,086.00 | \$43,535.62 |
| 12/12 | 5 | PCT/US06/44046 | 58718P/M743/ DBP | 1703 | ✓ | \$168.00 | \$43,367.62 |

https://ramps.uspto.gov/eram/Controller.jsessionid=0000_a_wH9CQc4z1Auo92MSicnm:... 12/18/2006

BEST AVAILABLE COPY

Deposit Account Statement

Page 4 of 5

| | | | | | | |
|------------|----------------|--------------------|------|---|-----------|-------------|
| 12/12 3 | PCT/US06/41886 | 55868/4316/TJD | 9204 | ✓ | -\$700.00 | \$44,067.62 |
| 12/12 2366 | 2413272 | 35285/M714/D24 | 7205 | ✓ | \$100.00 | \$43,967.62 |
| 12/13 2 | 10566144 | M521:57036/DBP | 8021 | ✓ | \$40.00 | \$43,927.62 |
| 12/13 1024 | 60869658 | P839:58794/WPC | 2005 | ✓ | \$100.00 | \$43,827.62 |
| 12/13 1411 | 11020752 | 53971/RR/T442 | 2253 | ✓ | \$510.00 | \$43,317.62 |
| 12/13 1663 | 11609772 | K163/58944/TXD | 1011 | ✓ | \$300.00 | \$43,017.62 |
| 12/13 1664 | 11609772 | K163/58944/TXD | 1111 | ✓ | \$500.00 | \$42,517.62 |
| 12/13 1665 | 11609772 | K163/58944/TXD | 1311 | ✓ | \$200.00 | \$42,317.62 |
| 12/13 2119 | 09690796 | 39477/RR/T850 | 1814 | ✓ | \$130.00 | \$42,187.62 |
| 12/13 2120 | 09690796 | 39477/RR/T850 | 1806 | ✓ | \$180.00 | \$42,007.62 |
| 12/13 102 | 10992881 | 53905/DJB/M743 | 1801 | ✓ | \$790.00 | \$41,217.62 |
| 12/13 375 | 11515364 | S1187:56688/DBP | 8021 | ✓ | \$40.00 | \$41,177.62 |
| 12/13 10 | 10743638 | 51493/DBP/Y35 | 1251 | ✓ | \$120.00 | \$41,057.62 |
| 12/13 45 | 10992881 | 53905/DJB/M743 | 1801 | ✓ | \$790.00 | \$40,267.62 |
| 12/13 2383 | 78487302 | 53537/ERS/M534 | 7004 | ✓ | \$150.00 | \$40,117.62 |
| 12/14 49 | PP16863 | A400:52284/DBP | 8003 | ✓ | \$45.00 | \$40,072.62 |
| 12/14 50 | PP16634 | A400:52241/DBP | 8003 | ✓ | \$45.00 | \$40,027.62 |
| 12/14 51 | PP16138 | A400:50624/DBP | 8003 | ✓ | \$45.00 | \$39,982.62 |
| 12/14 887 | 78410722 | 52479/M714/DBP | 7004 | ✓ | \$450.00 | \$39,532.62 |
| 12/14 2210 | 11561276 | 58193/H611/DBP | 1011 | ✓ | \$300.00 | \$39,232.62 |
| 12/14 2214 | 11561276 | 58193/H611/DBP | 1201 | ✓ | \$400.00 | \$38,832.62 |
| 12/14 2213 | 11561276 | 58193/H611/DBP | 1202 | ✓ | \$100.00 | \$38,732.62 |
| 12/14 2211 | 11561276 | 58193/H611/DBP | 1111 | ✓ | \$500.00 | \$38,232.62 |
| 12/14 2212 | 11561276 | 58193/H611/DBP | 1311 | ✓ | \$200.00 | \$38,032.62 |
| 12/14 1249 | 77063828 | 58958/P396/DBP | 7001 | ✓ | \$325.00 | \$37,707.62 |
| 12/14 1253 | 76537163 | 49051/R563/DBP | 7004 | ✓ | \$150.00 | \$37,557.62 |
| 12/14 375 | 29269227 | 58728/D521/DBP | 8021 | ✓ | \$40.00 | \$37,517.62 |
| 12/14 1318 | 78663128 | 55299/U356/MM | 7004 | ✓ | \$150.00 | \$37,367.62 |
| 12/14 386 | 10568567 | 57152/D587/DBP | 8021 | ✓ | \$40.00 | \$37,327.62 |
| 12/14 25 | 10984074 | 53787/DJB/V232 | 2202 | ✓ | \$200.00 | \$37,127.62 |
| 12/14 73 | 10373516 | 49362/DMC/C685 | 2253 | ✓ | \$510.00 | \$36,617.62 |
| 12/14 480 | 78963199 | G411:58324-ECM/DBP | 8507 | ✓ | \$15.00 | \$36,602.62 |
| 12/15 111 | 10930397 | 53422/S968/DBP | 8021 | ✓ | \$40.00 | \$36,562.62 |
| 12/15 557 | 77064594 | 58521/DBP/C721 | 7001 | ✓ | \$325.00 | \$36,237.62 |
| 12/15 572 | 77064602 | 58523/DBP/C721 | 7001 | ✓ | \$325.00 | \$35,912.62 |
| 12/15 601 | 77064616 | 58524/DBP/C721 | 7001 | ✓ | \$325.00 | \$35,587.62 |
| 12/15 353 | 11521931 | 58071/L550/DBP | 8021 | ✓ | \$40.00 | \$35,547.62 |
| 12/15 354 | 11521849 | 58182/S1082/DBP | 8021 | ✓ | \$40.00 | \$35,507.62 |
| 12/15 356 | 11541037 | 58425/Y35/DBP | 8021 | ✓ | \$40.00 | \$35,467.62 |
| 12/15 363 | 11528854 | S1170:57994/DBP | 8021 | ✓ | \$40.00 | \$35,427.62 |
| 12/15 367 | 11527750 | L550:58362/DBP | 8021 | ✓ | \$40.00 | \$35,387.62 |
| 12/15 1005 | 77064832 | 58879/T490/MM | 7001 | ✓ | \$325.00 | \$35,062.62 |
| 12/15 622 | 11514318 | 56825/DBP/S1187 | 8021 | ✓ | \$40.00 | \$35,022.62 |
| 12/18 198 | 78777915 | 56738/H320/DBP | 7002 | ✓ | \$100.00 | \$34,922.62 |
| 12/18 434 | 78754631 | 56218/H320/DBP | 7002 | ✓ | \$100.00 | \$34,822.62 |
| 12/18 489 | 78777906 | 56737/H320/DBP | 7002 | ✓ | \$100.00 | \$34,722.62 |
| 12/18 3 | 10573613 | 57428/M521/DBP | 9204 | ✓ | -\$100.00 | \$34,822.62 |
| 12/18 646 | 77065598 | 58690/C1068/DBP | 7001 | ✓ | \$325.00 | \$34,497.62 |

https://ramps.uspto.gov/eram/Controller.jsessionid=0000_a_wH9CQe4z1Auo92MSienm... 12/18/2006

BEST AVAILABLE COPY

Deposit Account Statement

Page 5 of 5

| | | | | |
|--------------------------|-----------------|--------|--------------|------------|
| 12/18 668 77065612 | 58970/K511/OAR | ✓ 7007 | \$275.00 | \$34,222. |
| 12/18 14 10921616 | 52778/RAG/S968 | ✓ 1801 | \$790.00 | \$33,432. |
| 12/18 573 11433176 | 55944/S1187/DBP | ✓ 8021 | \$40.00 | \$33,392. |
| 12/18 592 11541292 | 58447/Y35/DBP | ✓ 8021 | \$40.00 | \$33,352. |
| 12/18 599 11515321 | 58292/Y35/DBP | ✓ 8021 | \$40.00 | \$33,312. |
| 12/18 602 11520147 | 57077/S1187/DBP | ✓ 8021 | \$40.00 | \$33,272. |
| 12/18 609 11521321 | 57073/S1187/DBP | ✓ 8021 | \$40.00 | \$33,232. |
| 12/18 618 11521563 | 57074/S1187/DBP | ✓ 8021 | \$40.00 | \$33,192. |
| 12/18 619 11523967 | 57075/S1187/DBP | ✓ 8021 | \$40.00 | \$33,152. |
| 12/18 621 11528186 | 58446/Y35/DBP | ✓ 8021 | \$40.00 | \$33,112. |
| 12/19 1 60875005 | 58885/B317/DJB | ✓ 2005 | \$100.00 | \$33,012. |
| 12/19 316 6866757 | 58501/S1042/JOC | ✓ 8021 | \$40.00 | \$32,972. |
| 12/19 1814 11512461 | 58070/B884/MEG | ✓ 1051 | \$130.00 | \$32,842. |
| 12/19 1815 11512461 | 58070/B884/MEG | ✓ 1251 | \$120.00 | \$32,722. |
| 12/19 328 6866757 | 58501/S1042/JOC | ✓ 8021 | \$40.00 | \$32,682. |
| 12/19 2145 11612328 | 58883/L471/JWP | ✓ 4011 | \$75.00 | \$32,607. |
| 12/19 2146 11612328 | 58883/L471/JWP | ✓ 2111 | \$250.00 | \$32,357. |
| 12/19 2147 11612328 | 58883/L471/JWP | ✓ 2311 | \$100.00 | \$32,257. |
| 12/19 2443 11612372 | W491:57083/DMC | ✓ 4011 | \$75.00 | \$32,182. |
| 12/19 2444 11612372 | W491:57083/DMC | ✓ 2111 | \$250.00 | \$31,932. |
| 12/19 2445 11612372 | W491:57083/DMC | ✓ 2311 | \$100.00 | \$31,832. |
| 12/19 2446 11612372 | W491:57083/DMC | ✓ 2201 | \$200.00 | \$31,632. |
| 12/19 437 29267083 | F50:58557/DBP | ✓ 8021 | \$40.00 | \$31,592. |
| 12/19 107 1702467 | 47735/M816/AW | ✓ 8521 | \$40.00 | \$31,552. |
| 12/19 108 1702467 | 47735/M816/AW | ✓ 8522 | \$25.00 | \$31,527. |
| 12/19 1260 2022874 | 37814/S913-RAG | ✓ 7205 | \$100.00 | \$31,427. |
| 12/19 1261 2022874 | 37814/S913-RAG | ✓ 7201 | \$400.00 | \$31,027. |
| 12/19 78 60875394 | 58884/B317/DJB | ✓ 2005 | \$100.00 | \$30,927. |
| 12/19 259 11029310 | 52077/DMC/C885 | ✓ 2251 | \$60.00 | \$30,867. |
| 12/20 1 79015345 | 57638/5307/DBP | ✓ 6403 | \$100.00 | \$30,767. |
| 12/20 317 5529152 | G491:30/DBP | ✓ 8021 | \$240.00 | \$30,527. |
| 12/20 1280 78675828 | H228: 55669/MM | ✓ 7004 | \$150.00 | \$30,377. |
| 12/20 175 10930397 | 53422/DJB/S968 | ✓ 2501 | \$700.00 | \$29,677. |
| 12/20 176 10930397 | 53422/DJB/S968 | ✓ 1504 | \$300.00 | \$29,377. |
| 12/20 177 10930397 | 53422/DJB/S968 | ✓ 8001 | \$30.00 | \$29,347. |
| 12/20 69 10155801 | 47507/DMC/F179 | ✓ 1202 | \$50.00 | \$29,297. |
| 12/20 70 10155801 | 47507/DMC/F179 | ✓ 1253 | \$1,020.00 | \$28,277. |
| 12/20 156 2877166 | 49395/C951/MM | ✓ 8521 | \$40.00 | \$28,237. |
| 12/20 157 2877166 | 49395/C951/MM | ✓ 8522 | \$25.00 | \$28,212. |
| 12/21 11 E-REPLENISHMENT | 58489/B583 | ✓ 9203 | -\$75,000.00 | \$103,212. |
| 12/21 290 10666205 | | ✓ 8021 | \$40.00 | \$103,172. |
| 12/21 3129 60871102 | | ✓ 1005 | \$200.00 | \$102,972. |
| 12/21 1371 78637541 | 55221/C806 | ✓ 7003 | \$100.00 | \$102,872. |
| 12/21 399 11515388 | S1187:56826/DBP | ✓ 8021 | \$40.00 | \$102,832. |
| 12/21 11 11474028 | 57516/C766 | ✓ 2051 | \$65.00 | \$102,767. |
| 12/21 36 78604630 | 110.2°6/B844 | ✓ 7402 | \$300.00 | \$102,467. |
| 12/21 37 6545567 | 56807/V165 | ✓ 1551 | \$130.00 | \$102,337. |
| 12/21 39 6545567 | 56807/V165 | ✓ 1554 | \$130.00 | \$102,207. |

| | | | | |
|---------------------|----------------------|--------|----------|-----------|
| 12/21 4878 10573148 | 53601/L471/2AC1 | 2251 ✓ | \$60.00 | \$102,147 |
| 12/22 1 10846314 | 52407/RDS/A797 | 1253 ✓ | \$510.00 | \$101,637 |
| 12/22 711 78851769 | 57488/D569 / WNM | 7005 ✓ | \$100.00 | \$101,537 |
| 12/22 712 78851769 | 57488/D569 / WNM | 7001 ✓ | \$325.00 | \$101,212 |
| 12/22 1060 1422842 | 18716/Z22 / G5L | 7205 ✓ | \$100.00 | \$101,112 |
| 12/22 1061 1422842 | 18716/Z22 / G5L | 7201 ✓ | \$400.00 | \$100,712 |
| 12/22 197 10455873 | 50164/RAG/C766 | 2501 ✓ | \$700.00 | \$100,012 |
| 12/22 198 10455873 | 50164/RAG/C766 | 1504 ✓ | \$300.00 | \$99,712 |
| 12/22 199 10455873 | 50164/RAG/C766 | 8001 ✓ | \$30.00 | \$99,682 |
| 12/22 99 11498931 | 57776/B884 / MEC1 | 1051 ✓ | \$130.00 | \$99,552 |
| 12/22 100 11498931 | 57776/B884 / MEC1 | 1252 ✓ | \$450.00 | \$99,102 |
| 12/22 23 09944534 | 47013/SAH/S850 | 1251 ✓ | \$120.00 | \$98,982 |
| 12/22 5 10542177 | 155503/530717BP | 9204 ✓ | -\$50.00 | \$99,032 |
| 12/26 1 10679820 | 51005/ME6/M60 | 2251 ✓ | \$60.00 | \$98,972 |
| 12/26 11 11542744 | Y35:58334/DBP | 8021 ✓ | \$40.00 | \$98,932 |
| 12/26 88 78538699 | 54118/A23 / GJN | 7004 ✓ | \$300.00 | \$98,632 |
| 12/26 129 78275742 | 50732/R563 / GJN | 7004 ✓ | \$300.00 | \$98,332 |
| 12/26 154 78381112 | 52304/G440 / MM | 7003 ✓ | \$600.00 | \$97,732 |
| 12/26 74 11498931 | B884:57776/SM | 8021 ✓ | \$40.00 | \$97,692 |
| 12/26 319 77070575 | 58828/H669 / WGM | 7001 ✓ | \$325.00 | \$97,367 |
| 12/26 228 10571411 | 57056/M521 / DBP | 8021 ✓ | \$40.00 | \$97,327 |
| 12/26 691 78462150 | 53215/S1147 / SAH | 7004 ✓ | \$150.00 | \$97,177 |
| 12/26 696 78508696 | 53817/H362 / SAH | 7004 ✓ | \$150.00 | \$97,027 |
| 12/26 310 11543724 | S1187:58363/DBP | 8021 ✓ | \$40.00 | \$96,987 |
| 12/26 312 11543468 | L550:58289/DBP | 8021 ✓ | \$40.00 | \$96,947 |
| 12/26 32 11137743 | 55189/DMC/S584 | 1801 ✓ | \$790.00 | \$96,157 |
| 12/26 33 11137743 | 55189/DMC/S584 | 1251 ✓ | \$120.00 | \$96,037 |
| 12/26 36 60876246 | 58903/K163 / THD | 1005 ✓ | \$200.00 | \$95,837 |
| 12/27 196 78511642 | 53723/G504/DJS/LLB | 7004 ✓ | \$300.00 | \$95,537 |
| 12/27 213 78511648 | 53711/G504/DJS/LLB | 7004 ✓ | \$150.00 | \$95,387 |
| 12/27 242 78415265 | 52404/G504/DJS/LLB | 7004 ✓ | \$150.00 | \$95,237 |
| 12/27 969 60871911 | 59000/H675 / RAC1 | 2005 ✓ | \$100.00 | \$95,137 |
| 12/27 1 11229117 | 55436/DBP/Y35 | 1201 ✓ | \$200.00 | \$94,937 |
| 12/27 493 2514113 | 58632/A677-AW | 7205 ✓ | \$100.00 | \$94,837 |
| 12/27 494 2514113 | 58632/A677-AW | 7208 ✓ | \$200.00 | \$94,637 |
| 12/27 496 1463487 | 58632/A677-AW | 7205 ✓ | \$100.00 | \$94,537 |
| 12/27 497 1463487 | 58632/A677-AW | 7201 ✓ | \$400.00 | \$94,137 |
| 12/27 506 2033687 | 58630/A677-AW | 7205 ✓ | \$100.00 | \$94,037 |
| 12/27 507 2033687 | 58630/A677-AW | 7201 ✓ | \$400.00 | \$93,637 |
| 12/27 6 11517547 | 58325 / M521 / DBP | 9204 ✓ | -\$50.00 | \$93,687 |
| 12/27 6 10814618 | 52230/DBP/A400 | 1504 ✓ | \$300.00 | \$93,387 |
| 12/27 506 29268217 | 58644/M522 / RAC1 | 8021 ✓ | \$40.00 | \$93,347 |
| 12/28 89 6468563 | (50)39524/M521 / DBP | 8021 ✓ | \$40.00 | \$93,307 |
| 12/28 1470 10632347 | 50679/RAG/C766 | 2801 ✓ | \$395.00 | \$92,912 |
| 12/28 709 77072123 | 58892/A23 / GJN | 7001 ✓ | \$650.00 | \$92,262 |
| 12/28 314 10570636 | M521:57058/DBP | 8021 ✓ | \$40.00 | \$92,222 |
| 12/28 326 11518042 | 57376/S1187 / DBP | 8021 ✓ | \$40.00 | \$92,182 |
| 12/28 327 11512649 | 56926/S1187 / DBP | 8021 ✓ | \$40.00 | \$92,142 |

Deposit Account Statement

Page 7 of 7

| | | | | | |
|---------------------|-------------------|---------------------|----------------|------------|------------|
| 12/28 328 11521522 | 57072/S1187/DK | 8021 | ✓ | \$40.00 | \$92,102.1 |
| 12/28 69 09919365 | 45621/FLC/F179 | 1801 | ✓ | \$790.00 | \$91,312.1 |
| 12/28 70 09919365 | 45621/FLC/F179 | 1251 | ✓ | \$120.00 | \$91,192.1 |
| 12/29 1897 11617540 | 57811/A647/DJB | 1011 | ✓ | \$300.00 | \$90,892.1 |
| 12/29 1900 11617540 | 57811/A647/DJB | 1202 | ✓ | \$1,000.00 | \$89,892.1 |
| 12/29 1901 11617540 | 57811/A647/DJB | 1201 | ✓ | \$200.00 | \$89,692.1 |
| 12/29 1899 11617540 | 57811/A647/DJB | 1311 | ✓ | \$200.00 | \$89,492.1 |
| 12/29 1898 11617540 | 57811/A647/DJB | 1111 | ✓ | \$500.00 | \$88,992.1 |
| 12/29 17 10789218 | 52067/MEG/B603 | 2801 | ✓ | \$395.00 | \$88,597.1 |
| 12/29 652 78327017 | 51520/R563/GJN | 7004 | ✓ | \$150.00 | \$88,447.1 |
| 12/29 658 78531433 | 54055/T558/GJN | 7004 | ✓ | \$150.00 | \$88,297.1 |
| 12/29 663 78395729 | 52327/R563/GJN | 7004 | ✓ | \$150.00 | \$88,147.1 |
| 12/29 288 11524234 | 57953/S1187/DK | 8021 | ✓ | \$40.00 | \$88,107.1 |
| 12/29 290 11595549 | 58610/A400/DK | 8021 | ✓ | \$40.00 | \$88,067.1 |
| 12/29 294 11493150 | 58120/US/M981/INW | 8021 | ✓ | \$40.00 | \$88,027.1 |
| 12/29 296 US0628962 | | 8021 | ✓ | \$40.00 | \$87,987.1 |
| 12/29 721 2027454 | 26807/G207/DAR | 7205 | ✓ | \$100.00 | \$87,887.1 |
| 12/29 722 2027454 | 26807/G207/DAR | 7201 | ✓ | \$400.00 | \$87,487.1 |
| 12/29 769 78903326 | D569/57785/INW | 7001 | ✓ | \$325.00 | \$87,162.1 |
| 12/29 109 10794785 | 52050/DMC/S965 | 1251 | ✓ | \$120.00 | \$87,042.1 |
| 12/29 64 11417474 | 57635/C685/DML | 2201 | ✓ | \$100.00 | \$86,942.1 |
| 12/29 65 11417474 | 57635/C685/DML | 2202 | ✓ | \$575.00 | \$86,367.1 |
| START BALANCE | SUM OF CHARGES | SUM OF REPLENISH | END BALANCE | | |
| \$77,282.62 | \$68,060.00 | \$77,145.00 | \$86,367.62 | | |

Need Help? | [USPTO Home Page](#) | [Finance Online Shopping Page](#)



UNITED STATES PATENT AND TRADEMARK OFFICE

OCT. 26, 2006
SCA. 51493

DBY

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/743,638 | 12/22/2003 | Hyeong-Gon Noh | 51493/DBP/Y35 | 8214 |

23363 7590 10/26/2006

CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

RECEIVED

OCT 31 2006

CHRISTIE, PARKER & HALE, LLP

EXAMINER

WEINER, LAURA S

ART UNIT PAPER NUMBER

1745

DATE MAILED: 10/26/2006

Y35:
CASE # 51493 ACTION 1. Mon DA
REMINDER _____ DUE DATE 11/26/06
DEADLINE 11/26/06

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/743,638 | NOH ET AL. | |
| | Examiner | Art Unit | |
| | Laura S. Weiner | 1745 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 29 December 2003.

2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*; 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) ☒ All b) ☐ Some * c) ☐ None of:

 1. ☒ Certified copies of the priority documents have been received.

 2. ☐ Certified copies of the priority documents have been received in Application No. _____.

 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application 6) <input type="checkbox"/> Other: _____ |
|--|--|

DETAILED ACTION

Election/Restrictions

1. Claims are generic to the following disclosed patentably distinct species: An electrolyte comprising an additive represented by Formula 1 and a non-aqueous solvent. The species are independent or distinct because The additive has an X component that is a functional group that includes Y where X can be SO₂, CO, SO or PO and Y can be B, C, Si, N, P or S. The additive has an A component which can be O or NR. The non-aqueous organic solvent can be a cyclic carbonate, a linear carbonate, an ester, an ether, a ketone or mixtures thereof. The solvent can also further include an halogenated benzene. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Please define X, Y and A for the additive and chose a solvent or solvent system citing if the halogenated benzene is present.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

2. A telephone call was not made to request an oral election to the above restriction requirement, therefore did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

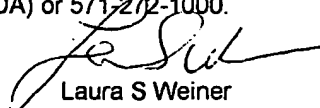
Application/Control Number: 10/743,638
Art Unit: 1745

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Laura S Weiner
Primary Examiner
Art Unit 1745

October 25, 2006

BEST AVAILABLE COPY

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
AMENDMENT TRANSMITTAL LETTER

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 27, 2006.

Signature

Confirmation No. 8214

Applicant : Hyeong-Gon Noh, et al.
Application No. : 10/743,638
Filed : December 22, 2003
Title : ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND
RECHARGEABLE LITHIUM BATTERY COMPRISING SAME

Grp./Div. : 1745
Examiner : Laura S. Weiner

Docket No. : 51493/Y35

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Post Office Box 7068
Pasadena, CA 91109-7068
November 27, 2006

Commissioner:

Enclosed is an amendment to the above-identified application.

| CLAIMS AS AMENDED | | | | | | |
|-----------------------------------|---|-------------------------------|---------------------------|----------------------|----------------------|-----|
| | Claims Remaining After Amendment | Highest Number Paid For | Number Extra Claims | Small Entity Rate | Large Entity Rate | FEE |
| Total Claims Fee | 20 | *20 | 0 | x \$25.00 | x \$50.00 | 0 |
| Independent Claims | 3 | ** 3 | 0 | x \$100.00 | x \$200.00 | 0 |
| Multiple Dependent Claims *** | | | | \$180.00 | \$360.00 | 0 |
| TOTAL FILING FEE | | | | | | 0 |
| NO ADDITIONAL FEE REQUIRED | IF NO FEE REQUIRED, INSERT "0" | | | | | 0 |
| LIST INDEPENDENT CLAIMS: 1, 9, 18 | | | | | | |

BEST AVAILABLE COPY

Amendment Transmittal Letter
Application No. 10/743,638

• IF HIGHEST NUMBER PREVIOUSLY PAID FOR IS 20 OR LESS, WRITE "20" IN COLUMN 3
•• IF HIGHEST NUMBER PREVIOUSLY PAID FOR IS 3 OR LESS, WRITE "3" IN COLUMN 3
••• PAY THIS FEE ONLY WHEN MULTIPLE DEPENDENT CLAIMS ARE ADDED FOR THE FIRST
TIME

____ Attached is our check for \$. to pay the fees calculated above.

____ A Petition for Extension of Time and the required fee are enclosed.

____ Other enclosures:

The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 and 1.17 which may be required by or to give effect to this paper to Deposit Account No. 03-1728. Please show our docket number with any charge or credit to our Deposit Account. A copy of this letter is enclosed.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

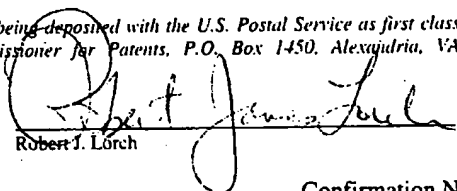
By David A. Plumley
David A. Plumley
Reg. No. 37,208
626/795-9900

DAP/rjl

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 27, 2006.


Robert J. Lorch

Confirmation No. 8214

Appl No. : 10/743,638
Applicant : Hyeong-Gon Noh, et al.
Filed : December 22, 2003
Title : ELECTROLYTE FOR RECHARGEABLE LITHIUM BATTERY AND
RECHARGEABLE LITHIUM BATTERY COMPRISING SAME

TC/A.U. : 1745
Examiner : Laura S. Weiner

Docket No. : 51493/Y35
Customer No. : 23363

RESPONSE TO RESTRICTION REQUIREMENT AND AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Post Office Box 7068
Pasadena, CA 91109-7068
November 27, 2006

Commissioner:

In response to the Office action of October 26, 2006, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.

Appln No. 10/743,638
Amdt date November 27, 2006
Reply to Office action of October 26, 2006

Amendments to the Specification:

Please replace the paragraph on page 1, lines 5-7 with the following paragraph:

This application claims priority to ~~an~~ Korean patent application No. 2002-84987 filed in the Korean Intellectual Property Office on December 27, 2002, the entire disclosure of which is incorporated hereinto by reference.

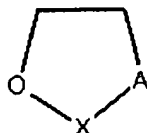
Appln No. 10/743,638
Amdt date November 27, 2006
Reply to Office action of October 26, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An electrolyte for a rechargeable lithium battery comprising:
a non-aqueous organic solvent;
a lithium salt; and
an additive represented by formula 1:



(1)

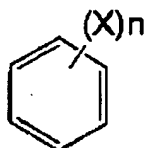
where X is a functional group that includes Y, where Y is an element selected from Groups 3, 4, 5, and 6 of the Periodic Table; and

A is O or NR, where R is a C₁ to C₆ alkyl group;

wherein if X is CO, A is NR.[()]]

2. (Original) The electrolyte of claim 1, wherein Y is selected from the group consisting of B, C, Si, N, P, and S.
3. (Original) The electrolyte of claim 1, wherein X is selected from the group consisting of SO₂, CO, SO, and PO.
4. (Original) The electrolyte of claim 1, wherein the additive is provided in an amount between 0.01 and 10 wt% of the weight of the non-aqueous organic solvent.
5. (Original) The electrolyte of claim 1, wherein the non-aqueous organic solvent is selected from the group consisting of cyclic carbonates, linear carbonates, esters, ethers, ketones and mixtures thereof.
6. (Original) The electrolyte of claim 5, wherein the non-aqueous organic solvent further comprises a halogenated benzene represented by formula 2[{}];

Appln No. 10/743,638
Amdt date November 27, 2006
Reply to Office action of October 26, 2006



(2)

where X is F, Cl, Br or I, and n is an integer from 1 to 3.

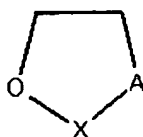
7. (Original) The electrolyte of claim 6, wherein the halogenated benzene is provided in an amount between 1 and 20 parts by weight based on 100 parts by weight of the electrolyte.

8. (Original) The electrolyte of claim 1, wherein the lithium salt is selected from the group consisting of lithium hexafluorophosphate (LiPF₆), lithium tetrafluoroborate (LiBF₄), lithium perchlorate (LiClO₄), lithium trifluoromethanesulfonate (CF₃SO₃Li), lithium hexafluoroarsenate (LiAsF₆) and mixtures thereof.

9. (Original) A rechargeable lithium battery comprising:
an electrolyte comprising a non-aqueous organic solvent, a lithium salt and
an additive represented by formula 1:

a positive electrode comprising a positive active material which is capable of
intercalating and deintercalating lithium; and

a negative electrode comprising a negative active material which is capable of
intercalating and deintercalating lithium; and



(1)

where X is a functional group that includes Y, where Y is an element belonging to Groups 3, 4, 5 or 6 of the Periodic Table; A is O or NR, where R is a C₁ to C₆ alkyl group; and if X is CO, A is NR.

Appln No. 10/743,638
Amdt date November 27, 2006
Reply to Office action of October 26, 2006

10. (Original) The rechargeable lithium battery of claim 9, wherein Y is selected from the group consisting of B, C, Si, N, P, and S.

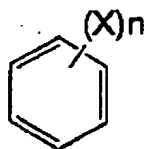
11. (Original) The rechargeable lithium battery of claim 1, wherein X is selected from the group consisting of SO₂, CO, SO, and PO.

12. (Original) The rechargeable lithium battery of claim 9, wherein the additive is provided in an amount from 0.01 to 10 wt% of the weight of the non-aqueous organic solvent.

13. (Original) The rechargeable lithium battery of claim 9, wherein the negative active material is selected from the group consisting of crystalline carbon, amorphous carbon and carbon composites.

14. (Original) The rechargeable lithium battery of claim 9, wherein the non-aqueous organic solvent is selected from the group consisting of cyclic carbonates, linear carbonates, esters, ethers, ketones and combinations thereof.

15. (Original) The rechargeable lithium battery of claim 14, wherein the non-aqueous organic solvent further comprises a halogenated benzene represented by formula 2:



(2)

where X is F, Cl, Br or I, and n is an integer from 1 to 3.

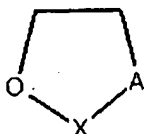
16. (Original) The rechargeable lithium battery of claim 15, wherein the halogenated benzene is provided in an amount from 1 to 20 parts by weight based on 100 parts by weight of the electrolyte.

17. (Original) The rechargeable lithium battery of claim 9, wherein the lithium salt is selected from the group consisting of lithium hexafluorophosphate (LiPF₆), lithium tetrafluoroborate (LiBF₄), lithium perchlorate (LiClO₄), lithium trifluoromethanesulfonate (CF₃SO₃Li), lithium hexafluoroarsenate (LiAsF₆) and combinations thereof.

18. (Original) An electrolyte for a rechargeable lithium battery comprising:

Appln No. 10/743,638
Amdt date November 27, 2006
Reply to Office action of October 26, 2006

a non-aqueous organic solvent;
a lithium salt; and
an additive of the form



where X is selected from the group consisting of SO₂, CO, SO and PO and A is selected from the group consisting of O and NR where R is a C₁ to C₆ alkyl group, wherein, if X is CO, A is NR.

19. (New) The electrolyte of claim 18 wherein X is SO₂ and A is O.
20. (New) The electrolyte of claim 19 wherein the non-aqueous organic solvent is a mixed solvent comprising at least one cyclic carbonate, at least one linear carbonate, and a halogenated benzene.

Appln No. 10/743,638
Amdt date November 27, 2006
Reply to Office action of October 26, 2006

REMARKS/ARGUMENTS

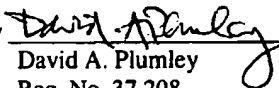
In response to the October 26, 2006 restriction requirement, applicant elects the additive represented by Formula (1a) in which Y is S, X is SO₂, and A is O. For the solvent, applicant elects a mixed solvent comprising one or more cyclic carbonates, one or more linear carbonates, and a halogenated benzene. This election is made without traverse.

Applicant submits that all of original claims 1-18 read on the elected species. New claims 19 and 20 have been added by amendment, and both read on the elected species. Claims 1-18 are generic as to the additive, and claims 1-5, 8-14, and 17-19 are generic as to the solvent.

Applicant has also amended the Cross-Reference to Related Application and claims 1 and 6 to correct typographical errors.

Claims 1-20 remain in this application. Applicant submits that all issues from the October 26, 2006 Office action have been addressed, however, if there are any remaining questions, the examiner is asked to contact applicant's counsel at the number below.

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By 
David A. Plumley
Reg. No. 37,208
626/795-9900

DAP/rjl

RJL PAS711994.1 - 11/27/06 5:54 PM